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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LELE, TANMAY S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/471,189

Applicant(s)

MIYAMARU ET AL.

Examiner

Tanmay S Lele

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.6.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 – 11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Regarding claims 1, 6, and 11, the phrase "substantially" renders the claim indefinite because it is a broad term. See MPEP § 2173.05(b).

Dependent claims 2 – 5 and 12 are rejected for at least the reasons seen in independent claim 1.

Dependent claims 7 – 10 and 13 are rejected for at least the reasons seen in independent claim 6.

Dependent claims 2 – 5 are rejected for at least the reasons seen in independent claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 3, 6 – 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allman et al (Allman, UK Patent Application, GB 2,103,043) in view of McMahon (McMahon, US Patent No. 6,908,168) in further view of Lenz (Lenz, US Patent No. 6,311,052).

Regarding claim 1, Allman teaches of a vehicular communication apparatus comprising (page 1, lines 18 – 24): at least one helmet worn by an operator of a vehicle (page 1, lines 18 – 24), said at least one helmet incorporated with a speaker and a microphone mounted thereon (Figures 1 and 2 and page 1 lines 25 – 43), and further including a mounted helmet side infrared transmitter/receiver connected to the speaker and the microphone (Figures 1 and 2 and page 1, lines 25 – 43 and lines 60 - 75).

Allman does not specifically teach of a vehicle body provided with a vehicle body side transmitter/receiver for carrying out communication with the helmet side transmitter/receiver; and wireless communication means connected to the vehicle body side transmitter/receiver and arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle or of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations, page 3, lines 90 – 95).

In a related art dealing with communications from a motorcycle, McMahon teaches of a vehicle body provided with a vehicle body side transmitter/receiver for carrying out communication with the helmet side transmitter/receiver (Figure 1 and column 2, lines 13 – 22); and wireless communication means connected to the vehicle body side transmitter/receiver and arranged with communication operating means separately from the wireless communication

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means in at a position operably accessible to the operator during operation of the vehicle (Figure 1 and column 2, lines 13 – 22 and column 3, lines 42 – 47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman's helmet communication apparatus, McMahon's centralized transmitter and receiver, for the purposes of providing means for easily accessible communications by the rider in case of emergency or other communications while riding a motorcycle, as taught by McMahon.

Allman and McMahon still do not specifically teach of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations, page 3, lines 90 – 95 and additionally, McMahon teaches of operation means on the handlebar, as stated in column 3, lines 42 – 47).

In a related art dealing with vehicular communications, Lenz teaches of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (column 1, lines 49 – 55 and column 2, lines 45 – 47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman and McMahon's vehicular communications system, Lenz's activation

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structure, for the purposes of safety (when communication was desired), as taught by both Lenz and McMahon.

Regarding claims 3 and 8, Allman, McMahon, and Lenz, teach all the claimed limitations as recited in claims 1 and 7. McMahon and Lenz further teach of wherein the vehicle is a handlebar type vehicle (Figure 1 of both), the vehicle body side infrared ray transmitter/receiver is arranged at a position offset to either a left side and a right side of the handlebar (McMahon: column 3, lines 42 – 47 and Lenz: column 1, lines 50 – 55); and Allman further teaches of the helmet side infrared ray transmitter/receiver is arranged at least at a front face of the helmet (Figure 1 and page 2, lines 2 – 16).

Regarding claim 6, Allman teaches of a vehicular communication apparatus (page 1, lines 18 – 24) comprising: at least one helmet worn by an operator of a vehicle (page 1, lines 18 – 24), said at least one helmet incorporated with a speaker and a microphone mounted thereon, and further including a mounted helmet side infrared transmitter/receiver connected to the speaker and the microphone (Figures 1 and 2 and page 1, lines 25 – 43 and lines 60 – 75); wireless communication means connected to the helmet side infrared ray transmitter/receiver (Figures 1 and 2 and page 1, lines 25 – 43 and lines 60 – 75), said wireless communication means being carried or attached to the operator (Figures 1 and 2 and page 1, lines 25 – 43 and lines 60 – 75 and page 1, lines 44 – 60).

Allman does not specifically teach of and a vehicle body mounted with a vehicle body side transmitter/receiver for carrying out infrared communication with the helmet side transmitter/receiver and arranged with communication operating means separately from the wireless communication means at a position operably accessible to the operator during operation

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of the vehicle or of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations, page 3, lines 90 – 95).

In a related art dealing with communications from a motorcycle, McMahon teaches of and a vehicle body mounted with a vehicle body side transmitter/receiver for carrying out infrared communication with the helmet side transmitter/receiver (Figure 1 and column 2, lines 13 – 22 and column 3, lines 42 – 47) and arranged with communication operating means separately from the wireless communication means at a position operably accessible to the operator during operation of the vehicle (Figure 1 and column 2, lines 13 – 22 and column 3, lines 42 – 47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman's helmet communication apparatus, McMahon's centralized transmitter and receiver, for the purposes of providing means for easily accessible communications by the rider in case of emergency or other communications while riding a motorcycle, as taught by McMahon.

Allman and McMahon still do not specifically teach of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations,

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page 3, lines 90 – 95 and additionally, McMahon teaches of operation means on the handlebar, as stated in column 3, lines 42 –47).

In a related art dealing with vehicular communications, Lenz teaches of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (column 1, lines 49 –55 and column 2, lines 45 –47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman and McMahon's vehicular communications system, Lenz's activation structure, for the purposes of safety (when communication was desired), as taught by both Lenz and McMahon.

Regarding claim 11, Allman teaches of a vehicular communication apparatus (page 1, lines 18 – 24), comprising a helmet worn by a passenger of a handlebar type small-sized vehicle (Figure 1 and page 1, lines 18 – 24), said helmet incorporated with a speaker and a microphone and mounted with a helmet side infrared ray transmitter/receiver connected to the speaker and the microphone (Figures 1 and 2 and page 1, lines 25 – 43 and lines 60 – 75).

Allman does not specifically teach of a vehicle body is arranged with a vehicle body side transmitter/receiver for carrying out communication with the helmet side transmitter /receiver or of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a

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lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations, page 3, lines 90 – 95).

In a related art dealing with communications from a motorcycle, McMahon teaches of a vehicle body is arranged with a vehicle body side transmitter/receiver for carrying out communication with the helmet side transmitter /receiver (Figure 1 and column 2, lines 13 – 22 and column 3, lines 42 – 47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman's helmet communication apparatus, McMahon's centralized transmitter and receiver, for the purposes of providing means for easily accessible communications by the rider in case of emergency or other communications while riding a motorcycle, as taught by McMahon.

Allman and McMahon still do not specifically teach of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (though Allman teaches of disposing enabling circuitry in different locations, page 3, lines 90 – 95 and additionally, McMahon teaches of operation means on the handlebar, as stated in column 3, lines 42 – 47).

In a related art dealing with vehicular communications, Lenz teaches of a cabinet having a lateral dimension substantially greater than a height dimension disposed along a rear surface of a handlebar of the vehicle in a position adjacent to a grip, the cabinet housing a communication

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module, the communication operating means being disposed on a lateral end of the cabinet adjacent to the grip (column 1, lines 49 –55 and column 2, lines 45 –47).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman and McMahon's vehicular communications system, Lenz's activation structure, for the purposes of safety (when communication was desired), as taught by both Lenz and McMahon.

6. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allman et al (Allman, UK Patent Application, GB 2,103,043) in view of McMahon (McMahon, US Patent No. 6,908,168) and of Lenz (Lenz, US Patent No. 6,311,052) as applied to claims 1 and 6, in further view of Hodsdon (Hodsdon, US Patent No. 4,972,051).

Regarding claims 2 and 7, Allman in view of McMahon and Lenz, teach all the claimed limitations as recited in claims 1 and 6. Allman in view of McMahon and Lenz do not specifically teach of further comprising a frequency selecting dial above the communication operating means (though both McMahon and Lenz teach of PTT or push to talk radio and McMahon further teaches of desired operating frequency, column 3, lines 30 –34).

In an analogous art dealing with PTT radio construction, Hodsdon teaches of further comprising a frequency selecting dial above the communication operating means (column 3, lines 6 –13).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman in view of McMahon and Lenz's vehicular communication system, Hodsdon's frequency selection, for the purposes of communicating with the desired recipient on a free channel, as taught by McMahon and Hodsdon.

7. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allman et al (Allman, UK Patent Application, GB 2,103,043) in view of McMahon (McMahon, US Patent No. 6,908,168) and Lenz (Lenz, US Patent No. 6,311,052) as applied to claims 3 and 8 above, and further in view of Schwerer (Schwerer, German Patent Application, DE 4,233,721).

Regarding claims 4 and 9, Allman, McMahon, and Lenz, teach all the claimed limitations as recited in claims 3 and 8. Both McMahon and Lenz further teaches of wherein the communication operating means arranged at the vicinity of the grip is combined with the vehicular side infrared ray transmitter /receiver (McMahon: column 3, lines 42 – 47; Lenz: column 1, lines 49 –55 and column 2, lines 45 –47).

Allman, McMahon, and Lenz, do not specifically teach of to thereby constitute an integrated module.

In related art dealing with a motorcycle police radio, Schwerer teaches of to thereby constitute an integrated module (Figure 1 and pages 1 and 2 of the translation, paragraphs 2 and 3).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman, McMahon and Lenz's vehicular communication system, Schwerer's combined transmitter and receiver positioned near the steering column, for the purposes of easy access to both the transmitter and receiver, as taught by Schwerer.

8. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allman et al (Allman, UK Patent Application, GB 2,103,043) in view of McMahon (McMahon, US Patent No. 6,908,168) and Lenz (Lenz, US Patent No. 6,311,052) as applied to claims 3 and 8

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above, and further in view of Atsuyoshi et al. (Atsuyoshi, Japanese Patent Application, JP 04-362613).

Regarding claims 5 and 10, Allman, McMahon, and Lenz, teach all the claimed limitations as recited in claims 1 and 7. Allman and McMahon do not specifically teach of further comprising a display unit for indicating a transmitting/receiving state of the wireless communication means, said display unit disposed in a vicinity of the grip of the handlebar.

In a related art dealing with motorcycles and display of functions, Atsuyoshi teaches of further comprising a display unit said display unit disposed in a vicinity of the grip of the handlebar (Constitution).

It would have been obvious to one skilled in the art at the time of invention, to have positioned the display near the handlebars, for the purposes of safe viewing by a rider and easier wiring to controls, as taught by Atsuyoshi.

Allman, McMahon, Lenz, and Atsuyoshi, do not specifically teach of for indicating a transmitting/receiving state of the wireless communication means.

It would have been obvious to one skilled in the art at the time of invention to have included into Allman in view of McMahon, Lenz and Atsuyoshi's controller, means for indicating a transmitting/receiving state of the wireless communication means, for the purposes of providing an easily viewable function determination of when one can talk (or is currently talking) or when one can listen (or is listening; as it should be noted that Allman's system is half-duplex, as stated on page 2, lines 54 -56), as taught by Atsuyoshi.

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allman et al (Allman, UK Patent Application, GB 2,103,043) in view of McMahon (McMahon, US

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Patent No. 6,908,168) and Lenz (Lenz, US Patent No. 6,311,052) and Atsuyoshi et al. (Atsuyoshi, Japanese Patent Application, JP 04-362613) as applied to claims 5 and 10 above, and further in view of Motoi (Motoi, US Patent No. 4,614,09).

Regarding claims 12 and 13, Allman in view of McMahon and Lenz and Atsuyoshi teach all the claimed limitations as recited in claims 5 and 10. Allman in view of McMahon and Lenz and Atsuyoshi do not specifically teach of comprising light emitting elements above the display unit (though Atsuyoshi does teach of a liquid crystal display device).

In a related art dealing with liquid display devices, Motoi teaches of comprising light emitting elements above the display unit (column 10, lines 48 -65).

It would have been obvious to one skilled in the art at the time of invention to have included into Allman in view of McMahon and Lenz and Atsuyoshi's vehicular communication display, Motoi's lighted means for a display, for the purposes of reading instrumentation when ambient light was not sufficient, as taught by Motoi.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


Tanmay S Lele
Examiner
Art Unit 2684

tsl
February 23, 2004


NAY MAUNG
SUPERVISORY PATENT EXAMINER